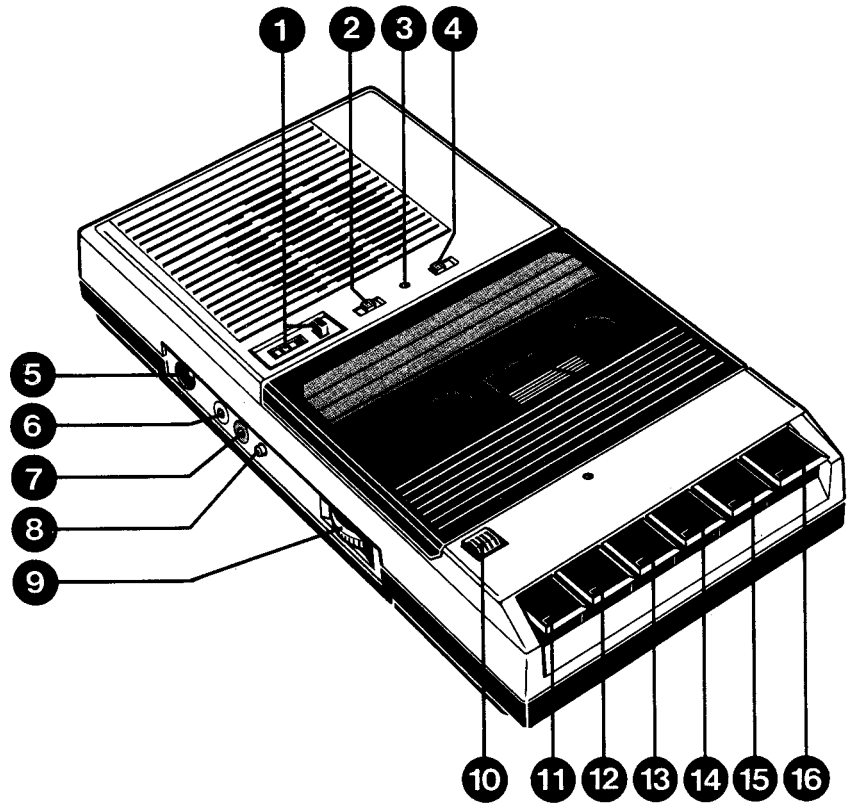
Service
Service
Service

Service Manual



36 769A

Documentation Technique Service Dokumentation Documentazione di Servizio Huolte-Ohje Manual de Servicio Manual de Serviço

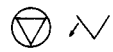
"Pour votre sécurité, ces documents doivent être utilisés par des spécialistes agréés, seuls habilités à réparer votre appareil en panne".

Subject to modification
4822 725 20406
Printed in The Netherlands

PHILIPS

Published by
Audio/Video Service

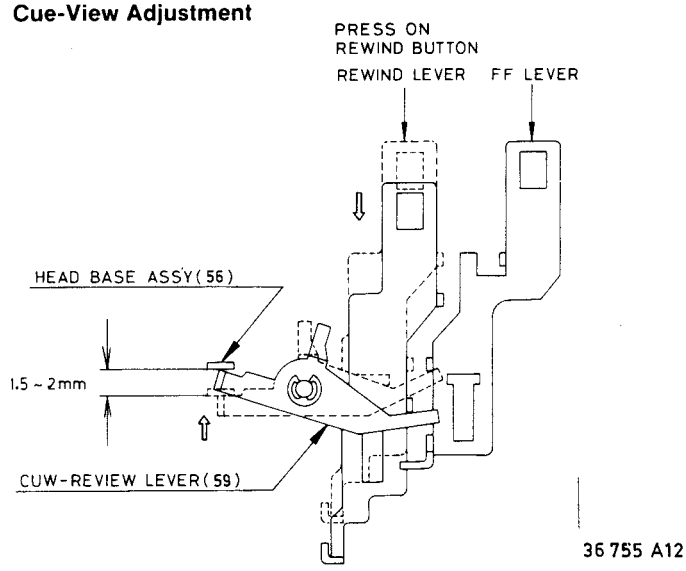
Connections and controls

1		Tape counter	
2		Phase switch	S3
3		Load save indicator	
4		Normal/Data monitor switch	S2
5		External supply DC	J4
6		Line out/earphone	J2
7		Line in/mice	J1
8		Remote control	J3
9			VR1
10			C.Mic
11			S4
12			S1, S4, S6
13			S1, S4, S6
14			S5, S4
15			S5, S4
16			

Specifications

	6V (4 x R6)		350 mW d = ⩽ 10%
Tape speed	4,76 cm/s ± 3%	Frequence response	125 - 6,3 kHz + 4 — 8 dB
Wow and Flutter	0,35%		
Play back torque	30-65 G/cm		

Cue-View Adjustment



Flywheel Adjustment

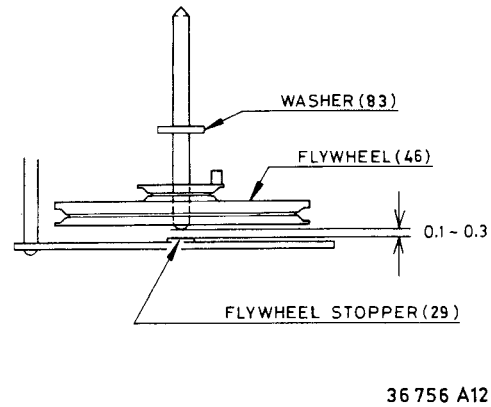
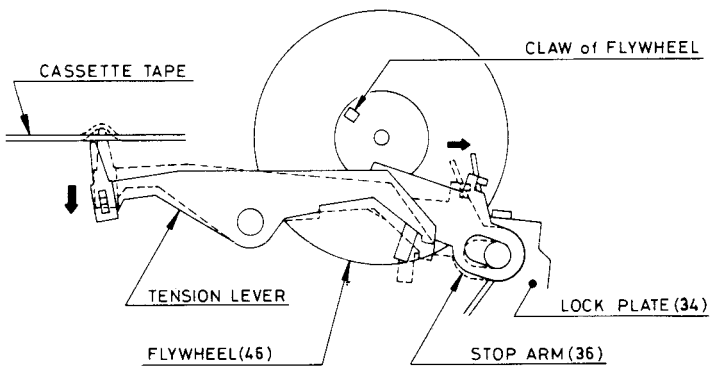
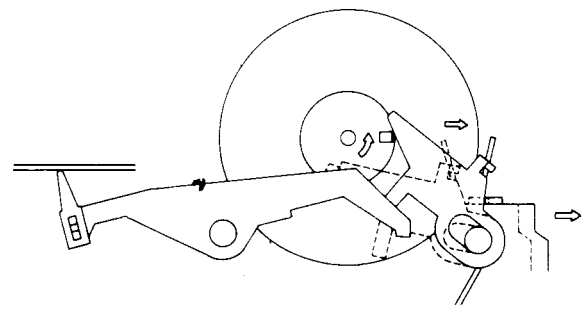


Fig. 7

Checking operation of autostop





(GB)

Cue-Review adjustment

If the "FF" or "Rew" button is depressed on a recorder set to "Play" mode ("Review" or "Cue"), the heads slide should move 1,5 to 2 mm.
This can be adjusted by means of the lug as shown in Fig. 7.

(F)

Réglage des fonctions Cue-Review

Lorsqu'on enfonce la touche "FF" (défilement rapide avant) ou la touche "Rew" (défilement rapide arrière), l'appareil étant en position "Play" (lecture), pour effectuer les positions "Review" ou "Cue", la glissière porte-têtes doit se déplacer sur 1,5 à 2 mm.
Ce déplacement peut être ajusté au moyen de la languette (voir la figure 7).

(NL)

Instelling Cue-Review

Wanneer de "Fast Forward" of "Rewind" toets is ingedrukt in de "Play" situatie ("review" of "cue") moet de koppenschuif 1,5 mm - 2 mm verschuiven. Dit kan worden ingesteld met de lip zoals aangegeven in Fig. 7.

(D)

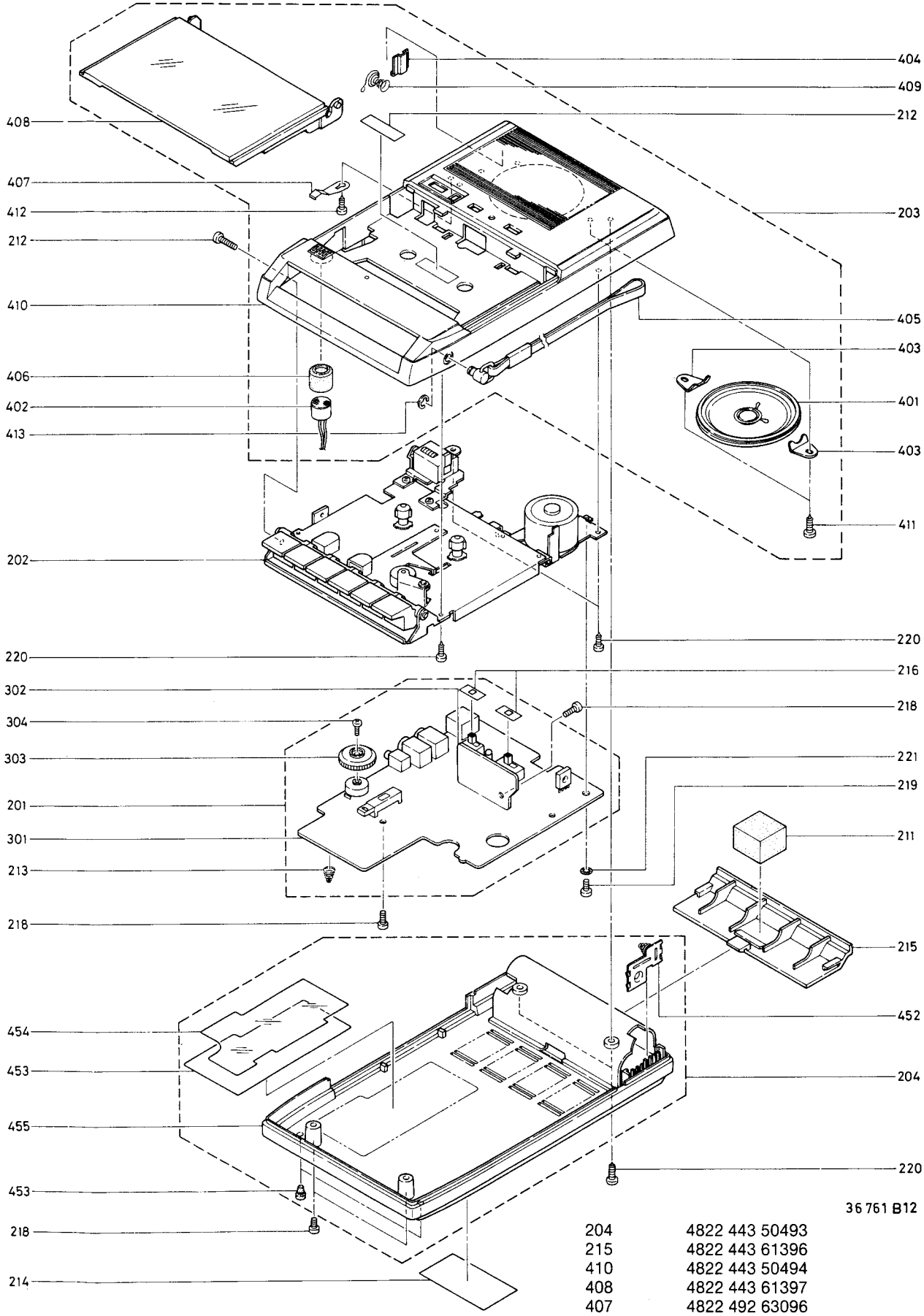
Einstellung "Cue-Review"

Wenn in der "Play"-Stellung ("Review" oder "Cue"), die FF-oder REW-Taste gedrückt ist, soll der Kopfschieber um 1,5 - 2 mm verschieben. Dies lässt sich einstellen mit der Zunge wie in Bild 7 dargestellt.

(I)

Regolazione del "cue-review"

Quando il tasto "avvolgimento accelerato" o "riavvolgimento" viene premuto in posizione "marcia" ("cue" o "review") il corsoro di testa deve muoversi di 1,5 a 2 mm, il chè può essere regolato con la linguetta come apparisce in Fig. 7



204	4822 443 50493
215	4822 443 61396
410	4822 443 50494
408	4822 443 61397
407	4822 492 63096
409	4822 492 51654
401	4822 240 30276
402	4822 242 10049
404	4822 290 80479
405	4822 403 51357
303	4822 413 41241

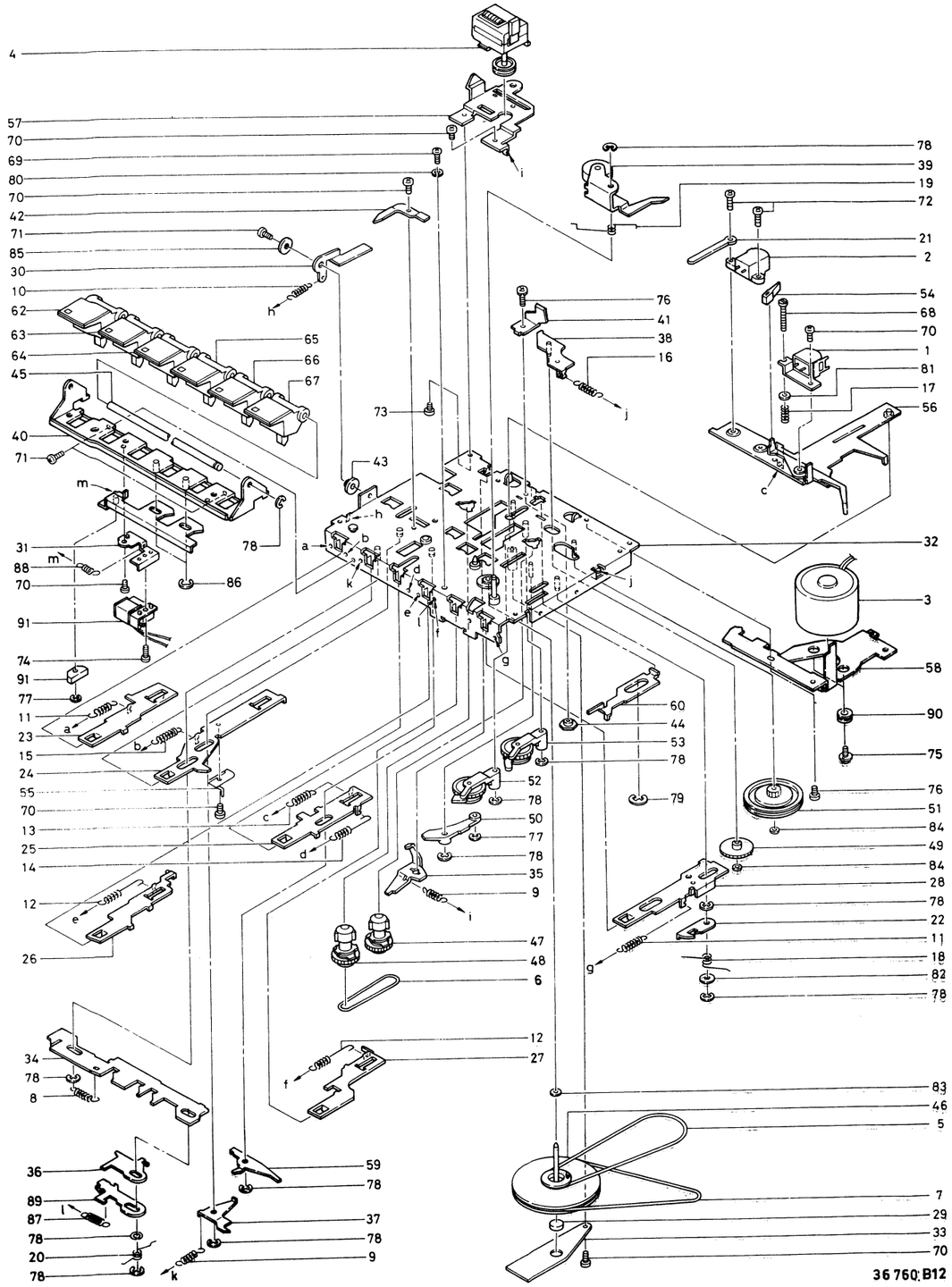


Fig. 1

1	4822 249 10221
2	4822 249 40168
3	4822 361 20504
4	4822 349 50204
5	4822 358 20176
6	4822 358 30427
7	4822 358 30428
8	4822 492 32427
9	4822 492 31718
10	4822 492 31719
11	4822 492 31721
12	4822 492 32429
13	4822 492 32158
14	4822 492 32428
15	4822 492 31805
16	4822 492 31806
17	4822 492 51331
18	4822 492 31724
19	4822 492 31725
20	4822 492 41151
22	4822 460 20242
23	4822 403 51745
24	4822 403 51746
25	4822 403 51747

Only those parts of which the Service Code numbers are stated are normal Service parts

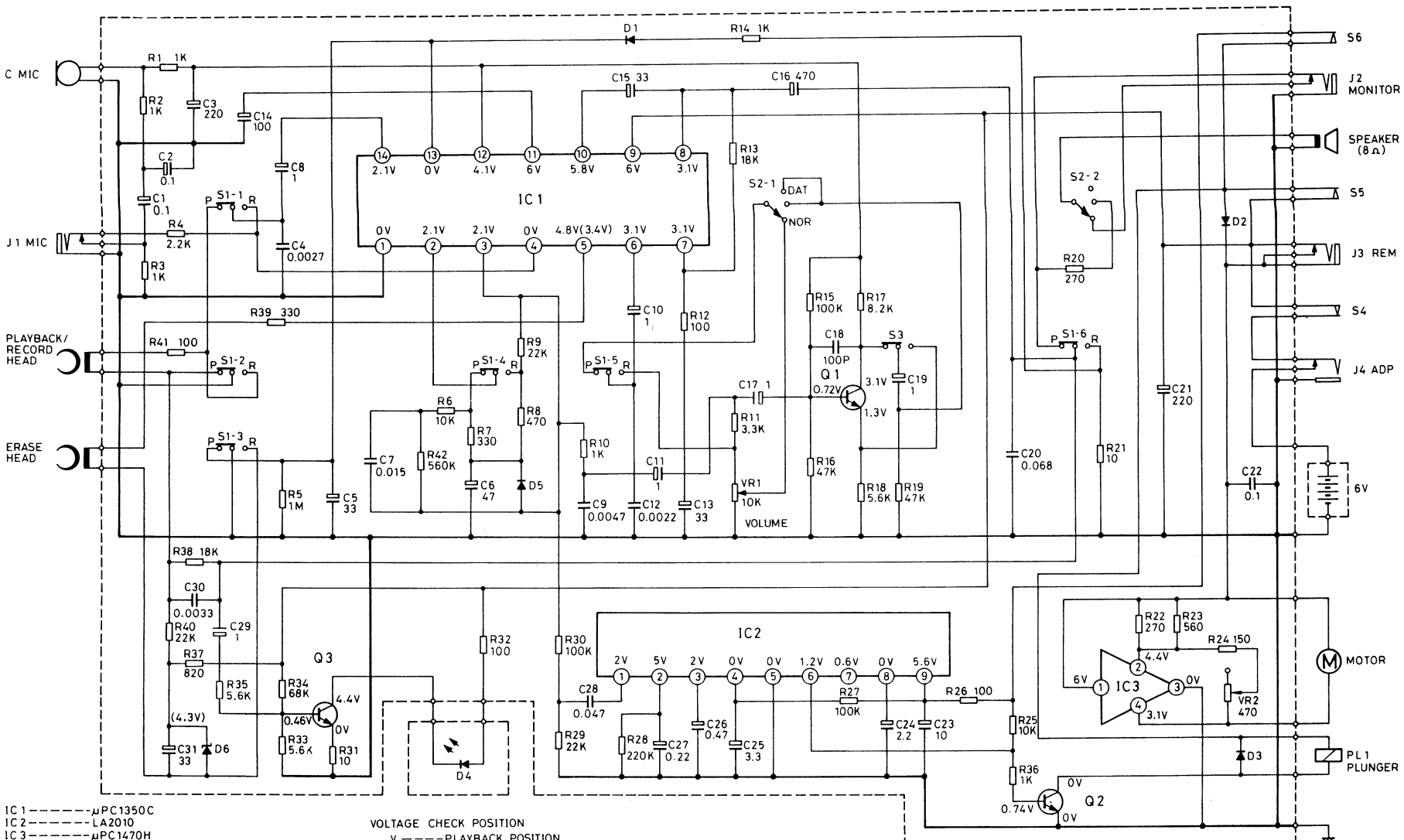
26	4822 403 51748
27	4822 403 51749
28	4822 403 52139
29	4822 532 51166
30	4822 403 51583
34	4822 459 80225
36	4822 403 10183
37	4822 403 52141
38	4822 403 51354
39	4822 403 51355
46	4822 528 81012
47	4822 528 20396
48	4822 528 20397
49	4822 522 10207
50	4822 403 52142
51	4822 528 20398
52	4822 403 40188
53	4822 403 40189
54	4822 403 40191
55	4822 492 63114
56	4822 403 52143
59	4822 403 52144
60	4822 403 52145
62	4822 410 23821
63	4822 410 23822
64	4822 410 23823
65	4822 410 23824
66	4822 410 23825
67	4822 410 23826
68	4822 502 30207
75	4822 502 30224
87	4822 492 32432
88	4822 492 32431

Adjustment	Cassette	Recorder in postion	Apply signal to	Measure on	Read on	Adjust with	Adjust to
Play back speed	3150 Hz of SBC420*	PLAY	—	J2	Wow- and flutter meter	VR2	
Azimuth R/P head	8 kHz of SBC420*	PLAY	—	J2	mV-meter	Screw 68 Fig. 1	Max. output

* SBC420: 4822 397 30071

* * *a* The maximum permissible speed deviation is 3%. Moreover, the wow-and-flutter value can be read. This value should not exceed 0.35%.

CS 97 807



IC 1 ------ μPC1350C
IC 2 ------ LA2010
IC 3 ------ μPC1470H

Q 1 ------ 2SC945-P, 2SC1815-GR, 2SC458-D or 2SC1684-S
Q 2 ------ 2SD467
Q 3 ------ 2SC2785-E, F or 2SC2458-GR

D1, 5 ------ MA150, 1N4148, 1S1588 or DS442
D2, 3 ------ SH-1A-02 or 1N4001
D 4 ------ TLR102A
D 6 ------ HZ5A-3 or RD4.7EB3

VOLTAGE CHECK POSITION
V ----PLAYBACK POSITION
(V) ----RECORDING POSITION

S 1 ---RECORD/PLAYBACK SWITCH (PLAYBACK POSITION)
S 2 ---NORMAL/DATA MONITOR ON/OFF SWITCH (NORMAL POSITION)
S 3 ---PHASE CHANGE SWITCH (REWIND POSITION)
S4 ---TAPE ON/OFF SWITCH(OFF POSITION)
S5 ---FAST-FORWARD/REWIND SWITCH (OFF POSITION)
S6 ---APDS SWITCH(OFF POSITION)

NOTES;
1. ALL RESISTANCE VALUES ARE IN Ω. K=1000Ω M=1000KΩ
2. ALL CAPACITANCE VALUES ARE IN μF. P=10⁻⁶μF
3. ALL RESISTORS ARE 1/6 WATT, UNLESS OTHERWISE SPECIFIED.
4. VOLTAGES MEASURED FROM POINT INDICATOR TO CHASSIS GROUND WITH V.T.V.M AT LINE VOLUME CONTROL MINIMUM AND NO SIGNAL.

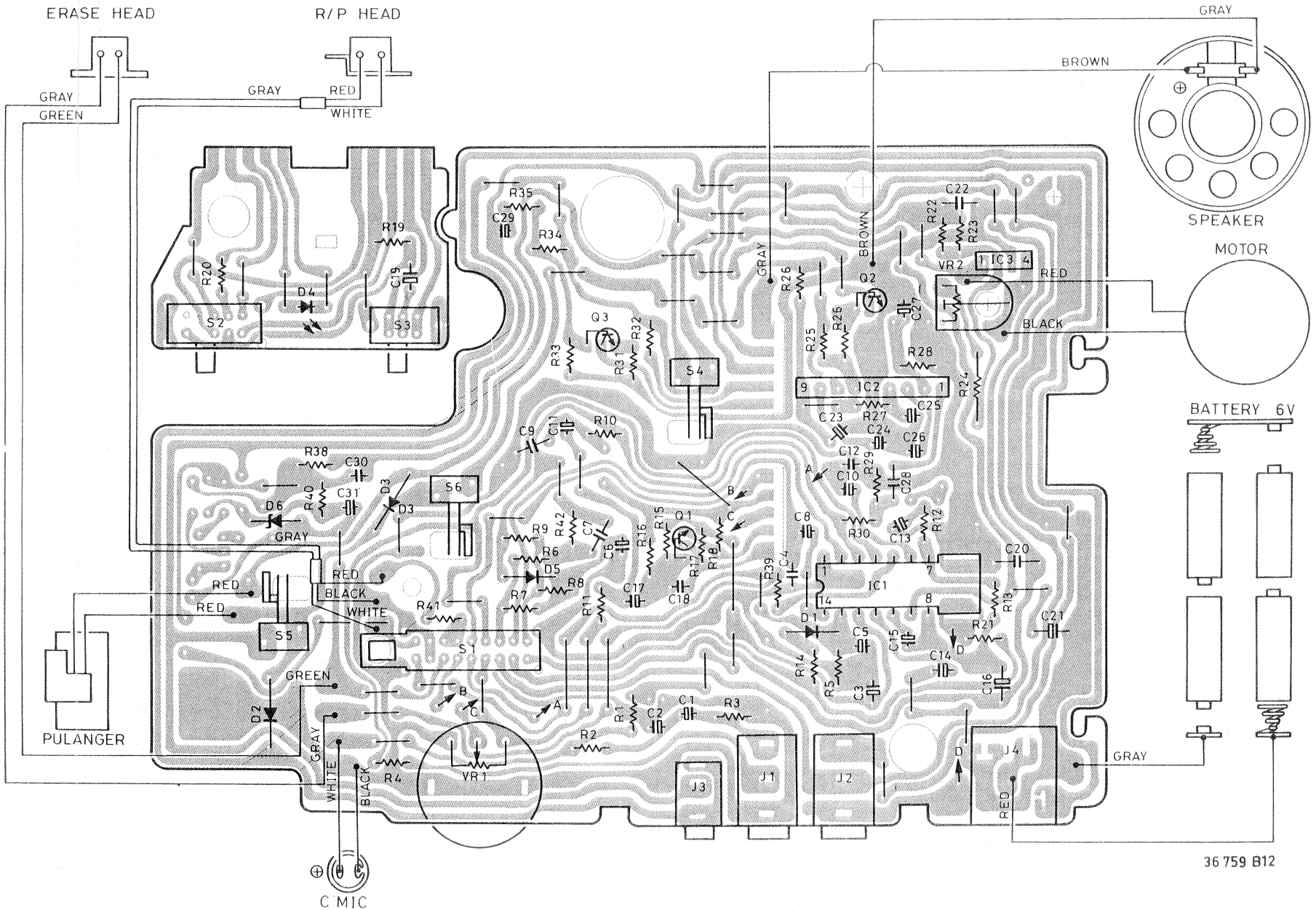
(SPECIFICATIONS AND CIRCUITS SUBJECT TO CHANGE WITHOUT NOTICE FOR IMPROVEMENT.)

AS FROM SERIAL NMBR 20001 THE POLARITY OF THE REMOTE CONTROL SOCKET J3 HAS BEEN REVERSED.

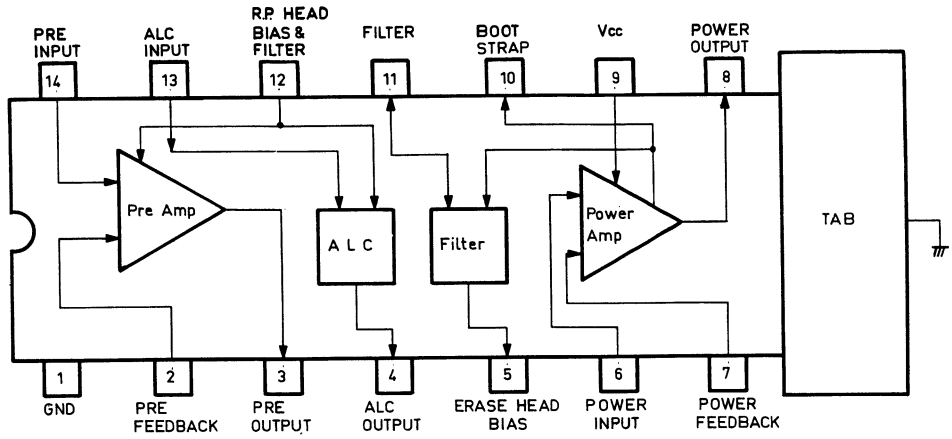
36 762 B12

CONTROL SOCKET J3 HAS BEEN REVERSED.

36 762 B12

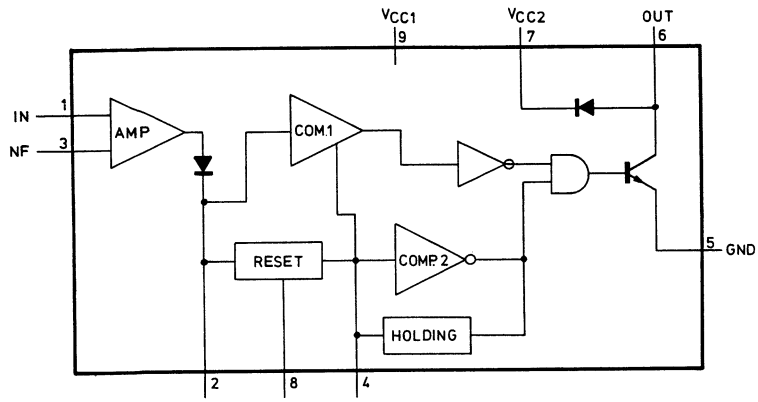


36 759 B12



BLOCK DIAGRAM VPC 1350C

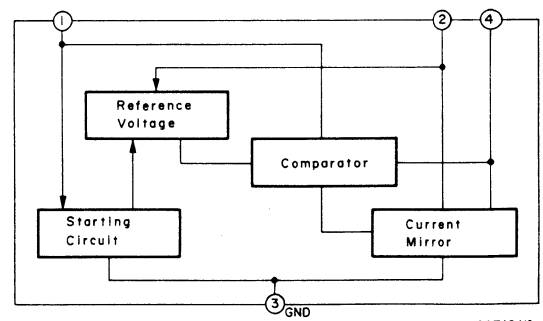
36 758 B12



BLOCK DIAGRAM L.A 2010

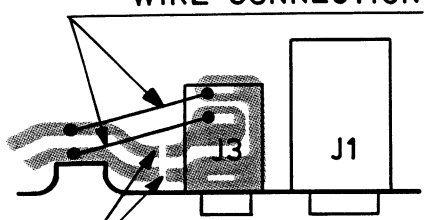
36 754 A12

μPC1470H (Motor Control)



36743A12

WIRE CONNECTION



TRACK INTERRUPTION

Fig.1

36 812 A12

For a proper switching of some computer versions, it may be necessary to reverse the polarity of the remote control socket. See Fig. 1.

-IC-		
1C1	μpc 1350 c	4822 209 80778
1C2	LA2010	4822 209 82424
1C3	μpc 1470H	4822 209 50107
-TS-		
Q1	2SC945-p	4822 130 41198
Q2	2SD467	4822 130 41521
Q3	2SC2785-E	4822 130 42364
-D-		
D1	IN4148	4822 130 30621
D2	IN4001	4822 130 31438
D3	IN4001	4822 130 31438
D4	LEDTLR102A	4822 130 32096
D5	IN4148	4822 130 30621
D6	RD4 7EB3	4822 130 34174

-Miscellaneous-		
J1	Mice	4822 267 30583
J2	Line out	4822 267 30579
J3	Remote control	4822 264 30135
J4	External supply	4822 264 30137
S1	R/P	4822 277 20802
S2	Normal/Data	4822 277 20955
S3	Phase	4822 277 20954
S4	R/P on-off	4822 277 60223
S5	FF/Rew	4822 277 60223
S6	APDS	4822 277 60223
-R-		
	VR1 volume	4822 101 20781
	VR2 Tape speed	4822 100 10427